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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,006	04/17/2001	Manfred Gerresheim	0656-0249P	1302

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EXAMINER

MAKI, STEVEN D

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 12/13/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/806,006

Applicant(s)

GERRESHEIM ET AL.

Examiner

Steven D. Maki

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-- Th MAILING DATE of this communication appears on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

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- 1) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2) Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is unclear how "in particular" affects the scope of the claim. The following changes are suggested:

(1) in claim 1 lines 3-4 delete --, in particular the inwardly disposed tread half (2) related to the vehicle,--;

(2) in claim 1 on lines 6-7 delete --, in particular the outwardly disposed tread half (3),--;

(3) in claim 5 line 5 change "outwardly disposed" to --other--;

(4) in claim 6 line 3, change "inwardly disposed" to --one--;

(5) in claim 9 last two lines delete --in the outwardly disposed tyre tread half (3)--

In claim 1, it is unclear how "which likewise extend over the tyre circumference" affects the scope of the claim. In claim 1, it is suggested to: (1) on line 8 before "narrower" insert --circumferential-- and (2) on lines 9-10, delete --which likewise extend over the tyre circumference--.

In claim 1 line 10, should "broad" be --wide--?

In claim 3, it is unclear how "amounts to" affects the scope of the claim. In claim 3 line 4, it is suggested to change "amounts to" to --is--.

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Claim 5 line 4 ambiguously refers to "the groove (5)". In claim 5 line 5, it is suggested to insert --narrower-- before "groove (5)".

In claim 9, it is unclear if the two circumferential grooves are the same as or in addition to the narrower grooves. In claim 9, it is suggested to change "two circumferential grooves (5) with a width of approximately 8 mm in each case are provided" to --each of the narrower grooves (5) have a width of approximately 8 mm--.

In claim 10 line 2, "the tread regions" should be --tread regions-- to avoid a minor antecedent basis problem.

In claim 10, there is no antecedent basis for "the tyre shoulders". In claim 12, it is suggested to change "the tyre shoulders" to --shoulders of the tyre--.

In claim 10, it is unclear how "preferably" affects the scope of the claim. In claim 10, it is suggested to delete --and preferably with changing inclination--.

In claim 12, there is no antecedent basis for "the tyre shoulders". In claim 12, it is suggested to change "the tyre shoulders" to --shoulders of the tyre--.

In claim 13, there is no antecedent basis for "the grooves (11) extending obliquely". In claim 13 line 1, it is suggested to change "claim 1" to --claim 11--.

In claim 13, it is unclear how "in particular" affects the scope of the claim. Also, there is no antecedent basis for "the tyre shoulders (12)". In claim 13 last three lines, it is suggested to delete --and in particular a depth which increases or first decreases and then reduces towards the tyre shoulders (12)--

In claim 15, "the grooves (5) which are narrow in comparison thereto" should be --the narrower grooves (5)--.

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3) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5) **Claims 1-4, 6-7 and 10-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Europe '305 (EP 676305).**

Europe '305 discloses a pneumatic tire having an asymmetric (non-uniformly profiled) tread. An **inside portion** of the tread comprises fine circumferential groove 23 and wide circumferential groove 5 having a width of at least 35 mm. An **outside portion** of the tread comprises fine circumferential groove 6 having a width of 1.5-7 mm and fine circumferential groove 23.

As to claim 1, the claimed tire is anticipated by the tire of Europe '305. The super wide groove reads on the wide groove 5. The at least two narrow grooves read on the fine groove 6 and the fine groove 23. As to the super wide groove width being greater than two times the narrow groove width, note Europe '305's teaching that (1) wide groove has a width of at least 35 mm, (2) each of grooves 6, 23 are fine grooves and (3) fine groove 6 has a width of 1.5-7 mm. In any event: As to claim 1, it would have been

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obvious to provide the grooves of Europe '305 such that the wide groove width is greater than two times the fine groove width in view of Europe '305's teaching that (1) wide groove has a width of greater than 35 mm, (2) each of grooves 6, 23 are fine grooves and (3) fine groove 6 has a width of 1.5-7 mm. Europe '305 therefore suggests using a width of 1.5-7 mm for fine groove 23. A groove width of 35 mm is five times a fine groove width of 7 mm.

As to claim 2, note Europe '305's teaching to use a fine groove width of 1.5-7 mm.

As to claim 3, note Europe '305's teaching to use a wide groove width of at least 35 mm and a fine groove width of 1.5-7 mm.

As to claim 4, each of Europe '305's circumferential grooves are straight. See figure 3.

As to claim 6, the wide groove is located in the inside half of the tread.

As to claim 7, the convex wall of the wide groove causes the wide groove to have a groove depth varying across its width as claimed.

As to claims 10-14, the claimed oblique grooves read on the lateral grooves 22. As to claim 11, note that this claim recites connected together "at least in part". As to claim 13, the limitation of the oblique grooves having a different depths over their longitudinal extent would have been obvious since it is taken as well known / conventional per se in the tire art to use lateral grooves having a increasing depth toward each tread edge in a tire tread in order to improve water removal / discharge.

6) Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '305 (EP 676305) as applied above and further in view of Swift et al (US 5425406).

As to claim 5, it would have been obvious to position the inner wall of the wide groove and the inner wall of the narrow groove the same distance from the equatorial plane (tread center) since (a) Europe '305 teaches that the fine groove may be disposed at any desired position and (b) Swift et al, also directed to an asymmetric tread comprising a wide circumferential groove and narrow circumferential grooves, shows locating the inner wall of the aquachannel (wide groove) and the inner wall of the narrow groove at about the same distance from the equatorial plane (see figure 1).

7) Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '305 (EP 676305) as applied above and further in view of Verider (US 3682220).

As to claims 7 and 8, it would have been obvious to provide the bottom of the wide groove of Europe '305 with the claimed varying depth across its width since Verider suggests using such a varying depth across the width of a wide groove (figure 4) to improve drainage.

8) Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '305 (EP 676305) as applied above and further in view of Tanaka (US 5679185).

As to claim 9, it would have been obvious to one of ordinary skill in the art to use a width of 40 mm for the wide groove and a width of 8 mm for the fine grooves in view of

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(a) Europe '305's teaching to use a wide width (at least 35 mm) and a narrow width (1.5-7 mm) for the wide groove and narrow groove respectively *to decrease noise* and

(b) Tanaka's teaching to use a wide width of at least 16% TW for a wide groove and a narrow width of 4-8% TW for a narrow groove *to reduce noise*. Tanaka thereby teaches one of ordinary skill in the art that 8% TW instead of 7 mm is upper limit for reducing noise of a fine groove.

9) Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '305 (EP 676305) as applied above and further in view of Glover et al (US 5327952).

As to claims 11-14, it would have been obvious to connect the circumferential grooves 5, 6, 23 together using lateral grooves since (a) Europe '305 suggests using lateral grooves in addition to the wide circumferential groove 5 and the narrow circumferential grooves 6 and 23 in an asymmetrical tread and (b) Glover et al suggests using lateral grooves in addition to a wide circumferential groove (aquachannel) and narrow circumferential grooves 16a in an asymmetrical tread (figure 5) such that all of the circumferential grooves are connected (this connection is most clearly seen in the symmetrical embodiment figure 6). As to claim 13, the limitations of the oblique grooves having a different depths over their longitudinal extent would have been obvious since it is taken as well known / conventional per se in the tire art to use lateral grooves having a increasing depth toward each tread edge in a tire tread in order to improve water removal / discharge.

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As to claim 15, it would have been obvious to use additional circumferential fine grooves as claimed since Glover et al, also teaching an asymmetrical comprising a wide circumferential groove and narrow circumferential grooves, clearly suggests using more than three circumferential grooves.

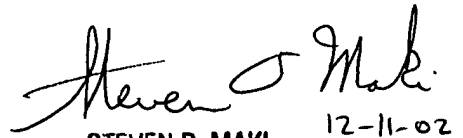
Remarks

- 10) The remaining references are cited of interest.
- 11) No claim is allowed.
- 12) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-2068. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki
December 11, 2002


STEVEN D. MAKI
PRIMARY EXAMINER
~~GROUP 1300~~
AU 1733
12-11-02